

REMARKS

Claims 1, 4, 6-10, 14-17 and 20-25 are pending in the present application, and are rejected. Claims 1, 14, 16, 17 and 20 are herein amended. No new matter has been entered.

Claim Rejections – 35 U.S.C. §112, first paragraph

Claims 1, 4, 6-7, 9-10, 14-17 and 20 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

The Examiner notes that claims 1, 14, 16, 17 and 20 have each been amended to recite a copolymer “obtained from a radical polymeric monomer composition consisting essentially of

- (a) 20 through 90 wt.% of styrene,
- (b) 10 through 80 wt.% alkyl acrylate or alkyl methacrylate wherein said alkyl acrylate, 2-ethylhexyl acrylate, and lauryl methacrylate, and
- (c) 5 through 10 wt.% polymeric monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate and N,N-diallylmethylammonium chloride”. The Examiner asserts that the breadth of this claim is not supported in the originally filed application.

The Examiner asserts that while the specification as filed provides support for the recitation of specific types of copolymers obtained from styrene, alkyl (meth)acrylate, and monomer including polar group that is 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate or N, N-diallylmethylammonium chloride, i.e. styrene, butyl acrylate, 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate or styrene, lauryl methacrylate, N, N-

diallylmethylammonium chloride, there is no support in the specification as originally filed to broadly recite copolymer. The only disclosure regarding monomer having polar group that is 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate or N, N- diallylmethylammonium chloride is found in Table 1 and example 8 of the present specification. The Examiner concludes that there is no support for broad recitation of copolymer as presently claimed.

The Examiner asserts that with the exception of Examples 3, 7 and 8 in Table 1 that show the use of specific amounts of 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate (BQA) and N, N- diallylmethylammonium chloride (DMCP) in combination with specific types of other monomers, i.e., 60 parts styrene, 40 parts, butyl acrylate, and 7 parts-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate or 7 parts styrene, 40 parts lauryl methacrylate, and 10 parts N,N- diallylmethylammonium chloride, there is no support to broadly recite the use of 5 through 10 wt.% monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N- trimethylammonium chloride acrylate or N, N- diallylmethylammonium chloride as presently claimed.

Applicants respectfully disagree with this rejection. Applicants first note that the Examiner previously determined that this exact language was supported and overcame a similar rejection. In the amendments filed on June 20, 2005, claims 1, 14, 17, and 20 were amended to recite "5 through 10 wt.% ..." in response to the rejection of insufficient support for the use of "1 or more wt.% ..." indicated in the Office Action issued on January 18, 2005. Accordingly, in the Office Action issued on October 6, 2005, page 2, lines 1-2, the Examiner indicated that "all outstanding rejections except for those described below are overcome by applicants' amendments

filed on June 20 and July 15, 2005". This is further indicated in the Advisory Action dated July 17, 2003. In light of this prosecution history alone, Applicants submit that the §112 rejection regarding "5 through 10 wt. %... in the outstanding Office Action is improper.

Secondly, Applicants note that both BQA and DMCP are disclosed as alternatives present in small amounts in addition to the (a) styrene and (b) alkyl acrylate or alkyl methacrylate, and there is no indication that they would be required in significantly different amounts. That the alternatives BQA and DMCP are present in varying amounts (5, 7 and 10 wt%) should be indicative that either of these alternatives can be present in any amount at least between 5 and 10 wt%. Applicants therefore traverse this rejection.

Claim Rejections – 35 U.S.C. §112, second paragraph

Claims 14-17 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner asserts that there is insufficient antecedent basis for the limitation "the primary particle" in line 22 of claim 14. Similar insufficient antecedent basis is found in each of claims 16 and 17 that recite the same phrase.

Applicants note that the second line of each of claims 14, 16 and 17 should be amended to refer to primary particles.

Moreover, while not presently rejected, Applicants note that claims 14, 16, 17 and 20 initially claim a "particle" but later refer to "particles". Applicants therefore amend the claims to make the number of these terms agree.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1, 4, 6-7, 9-10, 14-17 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Jones et al. (U.S. 5,936,008) in view of Kamada et al. (U.S. 5,695,899).

The Examiner asserts that the only difference between Jones et al. and the claimed invention is the requirement in the claims of the specific copolymer.

The Examiner notes that while Kamada et al. disclose the average particle size of the copolymer, there is no disclosure of the volume average particle size as presently claimed. However, the Examiner asserts that because Kamada et al. discloses that the copolymer possesses average particle size that overlaps that presently claimed, and because Kamada et al. produces the copolymer by emulsion polymerization as presently claimed, the Examiner concludes that the copolymer intrinsically possesses volume average particle size that overlaps that presently claimed.

The Examiner further admits that there is no disclosure in Kamada et al. of the softening point of the copolymer. However, the Examiner asserts that because Kamada et al. discloses copolymer obtained from same type and amounts of monomers as presently claimed, such copolymer would intrinsically possess softening point as presently claimed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success.

(Manual of Patent Examining Procedure (MPEP) §2142). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure.

Applicants respectfully disagree with the above rejection because there is no teaching in either of the cited references that the material of each reference would be applicable or desirable to the material of the other reference. That is, there is no reasonable suggestion to combine the cited references.

Applicants note that Kameda et al. is directed to a toner for developing electrostatic images in electrophotography, electrostatic recording and electrostatic printing. On the other hand, Jones et al. is directed to inks for use in inkjet printing processes. The two printing processes are effected in significantly distinctive ways, and each has significantly distinctive problems associated with the process. Moreover, the problems to be overcome with one process are significantly different than the problems associated with the other process. Therefore, particle sizes and other properties associated with a toner for developing electrostatic images in electrophotography, electrostatic recording and electrostatic printing would not be applicable to inks for use in inkjet printing processes, and one skilled in the art would not have combined the cited references in the manner asserted. Applicants therefore traverse the rejection.

Claims 1, 4, 6-7, 9-10, 14-17 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Jones et al. (U.S. 5,936,008) in view of Kamada et al. (U.S. 5,695,899), Patel et al. (U.S. 5,977,210), and Fujisawa et al. (U.S. 5,997,136).

The Examiner asserts that the sole difference between Jones et al. and the present claimed invention is the requirement in the claim of the specific copolymer. The Examiner concludes that in light of the motivation for using toner articles comprising copolymer and colorant disclosed by Kamada et al., for using copolymer having specific volume average particle diameter disclosed by Patel et al., and for using copolymer with specific softening temperature disclosed by Fujisawa et al. as described above, it would have been obvious to use such toner particles wherein the copolymer possesses such volume average particle diameter and softening point as the toner particles in Jones et al. in order to produce ink that has excellent color properties, excellent color reproduction and resolution, and excellent physical properties wherein the ink does not clog the toner particles and does not feather, and thereby arrive at the claimed invention.

As noted above, because the process of each of Kameda et al. and that of Jones et al. do not suggest addressing desired advantages or known problems associated with the other process, one skilled in the art would not look to the material of one for use in the process of the other. Thus, one would not have combined the references in the manner asserted.

In view of the aforementioned clarifying amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

Application No. 09/492,373
Attorney Docket No. 991444

Amendment under 37 C.F.R. §1.111
Amendment filed August 3, 2007

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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